REMARKS

Claims 15-20 were rejected under 35 U.S.C. 103(a). Applicant has amended claim 15. No claim is canceled. No new matter adds through the amendments. For the reasons discussed below, withdrawal of the rejections is requested.

Claim Rejections- under 35 U.S.C. 103(a):

Claims 15-16 were rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Drawings in view of Wu (US 5,977,561) and Cho et al (US 5,578,838).

Applicant respectfully traverses the rejection. Nevertheless, Applicant has further amended claim 15 to more clearly define the present invention. The amended claim 15 reads as follows:

Claim 15. A thin film transistor structure, comprising:
an insulating substrate;
a polysilicon layer over the substrate;
a gate structure over the polysilicon layer, wherein the gate structure includes a gate layer, a gate dielectric layer between the gate layer and the polysilicon layer and a spacer on each side of the gate layer, wherein the spacer with respect to a surface of the gate layer and a surface of the polysilicon layer forms a contrast surface; and
a selective conductive layer directly on the gate layer and directly on the polysilicon layer adjacent to the spacers based on the contrast surface, wherein the selective conductive layer adjacent to the spacers directly serves as a source/drain region.

The Office Action acknowledged that Applicant's Prior Art Drawings fails to disclose a selective conductive layer serves as a source/drain region, but relied on Cho to teach a conductive layer (14) that functions as a source/drain region.

However, conductive layer 14 of Cho is not a selective conductive layer. It is formed on entire dielectric layer 13 (See Fig. 3), while, in the present invention as defined in claim 15, the selective conductive layer is formed on the gate layer and on the polysilicon layer, but substantially not on the contrast surface of the spacers. That is why it is referred to as selective conductive layer (See page 6, lines 9-23, of the specification).

Furthermore, conductive layer 14 is not directly formed on a gate layer and a ultra thin polysilicon layer. While the amended claim 1 recites a selective conductive layer directly on the

gate layer and directly on the polysilicon layer adjacent to the spacers based on the contrast surface.

For at least the reasons discussed above, claim 15 and its dependent claim 16 are patentable over the cited references.

Claim 17 was rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Drawings in view of Wu (US 5,977,561), Cho et al (US 5,578,838), and Kawachi et al (US 6,104,040).

Kawachi is cited to teach a thin film transistor with a SiGe conductive layer. However, Kawachi cannot cure the above discussed deficiencies of Applicant's Prior Art Drawings, Wu and Cho et al. Therefore, claim 15 as well as its dependent claim 17 are patentable over the cited references.

Furthermore, the intrinsic (a-Si) layer 30 (which can be a silicon germanium layer) of Kawachi is formed on a gate insulation layer 20 (Fig. 5 and col. 5, lines 15-17), not on a gate layer or a polysilicon layer. Kawachi also fails to teach the intrinsic SiGe layer 30 is an in-situ doped silicon-germanium (SiGe) layer as required by claim 17.

Claims 18-19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Drawings in view of Wu (US 5,977,561), Cho et al (US 5,578,838), and Nakajima et al (US 6,118,140).

Claim 20 was rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art Drawings in view of Wu (US 5,977,561), Cho et al (US 5,578,838), and Gardner et al (US 5,872,376).

Neither Nakajima nor Garner can cure the above discussed deficiencies of Applicant's Prior Art Drawings, Wu and Cho et al. Therefore, claim 15 as well as its dependent claims 18-20 are patentable over these cited references.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that the remaining claims 15-20 are patentable over the cited prior art. Allowance of this application is earnestly solicited.

Respectively submitted

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